



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,881	09/08/2003	Augusto D. Hernandez	08215-549001 / P06-026886	8107
26171 7590 11/15/2007 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER SMITH, RICHARD A	
			ART UNIT 2859	PAPER NUMBER
			MAIL DATE 11/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,881

Applicant(s)

HERNANDEZ ET AL.

Examiner

R. Alexander Smith

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-22, 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-6, 23-25 and 28 is/are rejected.
- 7) ☒ Claim(s) 7-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20070910.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 10, 2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-6, 23, 24 and 28 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,092,071 A to Simpson, Jr. et al. in view of US 5,506,791 to Hungerford et al.

Simpson, Jr. et al. discloses a position indicator having an input shaft 32 having an angular velocity, a display includes a pointer 23 to indicate a position of a tap changer (column 2, lines 65-72) and the pointer has an angular velocity, a non-linear drive mechanism (figures 2-5), the mechanism includes a Geneva type mechanism and motion includes a dwell (figures 3-5 and associated text), a housing 21 to house the position indicator display, and the pointer being mounted on the drive mechanism (the drive mechanism includes shaft 24).

Simpson, Jr. et al. does not disclose:

a polymer housing, a one-piece clear polymer cover enclosing the position indicator display and mechanism in the polymer housing, a hinge connected to the cover; and a hand-operated fastening device that secures the one-piece clear polymer cover to the polymer housing such that a seal is provided between the polymer housing and the one-piece clear polymer cover, wherein the cover can be rotated about the hinge,

wherein the hand-operated fastening device includes a latch, and the latch secures the one-piece clear polymer cover to the polymer housing such that the one-piece clear polymer cover can be opened without the use of tools,

wherein the hinge includes a first portion that is integrated with the polymer housing and a second portion that is integrated with the one-piece clear polymer cover.

Hungerford et al. discloses an indicator with mechanism which is housed in a polymer housing (column 6 lines 23-48), a one piece clear polymer cover (door 6), a hinge (6A) and latch (6B as shown in figures 1 and 4) which states the advantages of impact resistance, resistance to stresses from mounting and harsh conditions, water-tightness, dust-tightness and corrosion resistant.

Hungerford discloses the hinge connected to the cover; and a hand-operated fastening device that secures the one-piece clear polymer cover to the polymer housing (figure 4) such that a seal is provided between the polymer housing and the one-piece clear polymer cover (via the discussion of seals and of being submersible, water-tight, etc. even when the door 6 is open), wherein the cover can be rotated about the hinge,

wherein the hand-operated fastening device includes a latch (6B), and the latch secures the one-piece clear polymer cover to the polymer housing such that the one-piece clear polymer cover can be opened without the use of tools (per figure 4),

wherein the hinge includes a first portion that is integrated with the polymer housing and a second portion that is integrated with the one-piece clear polymer cover (as shown via the piano hinge of figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the housing for the position indicator, taught by Simpson, Jr. et al., by making the housing a polymer housing, and adding a one piece clear polymer cover, a hinge and latch to the housing, as suggested by Hungerford et al., in order to (a) provide impact resistance,

resistance to stresses from mounting and harsh conditions, dust resistant and corrosion resistant, as taught by Hungerford et al., and (b) to protect the pointer from being bumped and damaged, (c) to keep dirt, oil, water, etc. from affecting the pointer and the readability of the dial face, and (d) to allow easier servicing of the components of the position indicator when needed.

4. Claim 25 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson, Jr. et al. and Hungerford et al. as applied to claims 1-6, 23, 24 and 28, further in view of US 2,800,248 to Truesdell et al.

Simpson, Jr. et al. and Hungerford et al. together teach all that is claimed as discussed in the above rejections of claims 1-6, 23, 24 and 28. Furthermore, Hungerford et al. discloses a circumferential lip on the cover as best seen in figures 3 and 4 (unmarked, i.e., roughly where latches 6B grab).

Simpson, Jr. et al. and Hungerford et al. do not teach a compliant gasket positioned within groove of the housing such that the gasket interfaces with the circumferential lip on the cover.

Truesdell et al. discloses an instrument housing having a housing and a removable cover wherein a gasket (15 in figure 3) is positioned within a groove (14) so that when the cover is attached to the housing the joint is sealed. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the housing, taught by Simpson, Jr. and Hungerford et al., to include a groove and a gasket therein, as taught by Truesdell et al., in

order to seal the joint between the cover and the housing so as to provide additional protection of the instrument or components therein from the environment.

Response to Arguments

5. Applicant's arguments filed September 10, 2007 have been fully considered but they are not persuasive.

With respect to page 7 and Simpson and Hungerford and the argument regarding the cover may be rotated about a hinge: The purpose of a hinge is generally to allow a door or cover to pivot, i.e., rotate about the hinge, and this appears to be met by Hungerford.

With respect to no suggestion or motivation to modify the housing of Simpson to include such a feature as argued on page 7, the argument that Simpson does not disclose a cover of any sort spanning pages 7-8: This argument is not persuasive. Older patents rarely disclose details which would have been considered as obvious to one of ordinary skill in the art, particularly when the details were not directly addressing the invention that was claimed. Simpson was addressing an indicator mechanism to improve the accuracy thereof as stated in column 1 lines 9-11 and this is where Simpson provided details.

With respect to Hungerford as argued in the middle paragraph of page 8 regarding the complexity of the case and the argument "*However, Hungerford never describes or suggests that the lockable latches 6B secure the door 6 to the case 1 such that a seal is provided between the case 1 and the door 6. Rather, Hungerford*

seals the case 1 and the operating panel 2 so as to be watertight even when the door 6 is open. See Hungerford at col. 6, lines 41-48. In other words, securing Hungerford's door 6 to the case 1 does not provide a seal between the case 1 and the door 6.

Thus, like Simpson, Hungerford also does not describe or suggest hand-operated fastening device that secures a one-piece polymer cover to a polymer housing such that a seal is provided between the polymer housing and the one-piece clear polymer cover, or that the cover can be rotated about the hinge, as recited in claim 1." The examiner disagrees, the use of "even when the door is open" would suggest to one of ordinary skill in the art that the cover is sealed when shut, else Hungerford would not have used the word "even" particularly given the discussion of keeping the case sealed and given the discussion of being watertight, dust-tight and corrosion resistant.

With respect to the argument at the top of page 9 addressing Simpson implicitly teaches away from a cover: The examiner disagrees for the reason above addressing older patents and given that the dial face does provides a rough cover for the Geneva mechanism but does not provide protection for the pointer nor the dial face. Furthermore, Hungerford does provide a motivation to protect an instrument in a sealed enclosure.

With respect to the arguments from the middle of page 9 regarding Hungerford and door 6 and the argued details thereof to the middle of page 10 regarding claim 3: The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Hungerford would suggest to one of

ordinary skill in the art that a sealed case with sealing cover and having a hinge and latch would promote water-tightness, dust-resistance, and corrosion resistance; would allow easy access; and would allow a user or observer to view the contents or potential problems therein. It therefore would have been obvious to modify Simpson as suggested by Hungerford for the motivating reasons as applied in the rejection above.

With respect to claim 25 and the argument on page 10: This argument is not persuasive since Truesdell was not relied upon for a teaching of a hand-operating fastening device, a polymer cover, or a polymer housing, and a rotating hinge. The argument appears to be an argument of nonanalogous art. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Truesdell is relevant to the particular problem which is to assure a good seal between the cover and the case.

Allowable Subject Matter

6. Claims 11-22, 26 and 27 are allowable

7. Claims 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

8. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

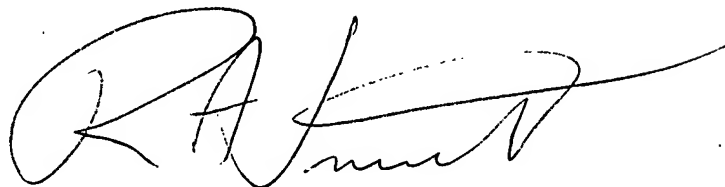
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/656,881
Art Unit: 2859

Page 10

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'R. Alexander Smith', with a long horizontal flourish extending to the right.

R. Alexander Smith
Primary Examiner
Art Unit 2859

November 13, 2007